



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,019	05/05/2005	Atsushi Miyasaka	Q87868	2791
23373 7590 01/11/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER MAKI, STEVEN D	
			ART UNIT 1733	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/534,019

Applicant(s)

MIYASAKA, ATSUSHI

Examiner

Steven D. Maki

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-15 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 050505.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

Art Unit: 1733

1) The disclosure is objected to because of the following informalities: The references to the claims in the specification should be deleted. The abstract should be one paragraph.

Appropriate correction is required.

2) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3) Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 11, there is no antecedent basis for "the second land row".

4) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Colombo et al

- 6) **Claims 1 and 4-6 are rejected under 35 U.S.C. 102(a),(e) as being anticipated by Colombo et al (WO 2003/013881).**

The claimed tire is anticipated by Colombo et al's tire. The claimed chamfer portions read on the notches. With respect to "depth gradually increasing", Colombo et al teaches that a curved surface may be used instead of a flat one for the notches.

Japan 109

- 7) **Claims 1 and 4-9 are rejected under 35 U.S.C. 102(a),(b) as being anticipated by Japan 109 (JP 2002-293109).**

Japan 109, directed to suppressing uneven wear and reducing resonance sound discloses a pneumatic tire with a tread comprising central block rows and shoulder block rows. Projecting parts 18 are formed on the walls of the blocks facing the circumferential grooves. The upper surface of the projecting part 18 extends from the tread surface and is inclined at angle θ_2 . Since the projecting part 18 is part of the block, the height of the block varies in the circumferential direction. The "chamfer depth" c is 10-50% of the groove depth b. Figures 2 and 3 show the relative size between the width of the "chamfer portion" (projecting part 18), the width of the block and the width of the circumferential groove. Figure 3 shows the chamfer portion 18 and the "non chamfer portion" being connected at substantially the same position at the bottom of the circumferential groove.

The claimed tire reads on Japan 109's pneumatic tire. The claimed bilateral land portion rows read on the shoulder rows of blocks and the claimed central land portion

Art Unit: 1733

reads on one of the remaining rows of blocks. The claimed chamfer portions read on the projecting parts 18. In claim 1, "the vicinities of both sides in a tire width direction of the central land portion row are made uneven in the tire circumferential direction" reads on vicinities of both sides in a tire width direction of a central land portion row being "made uneven" by projecting parts 18 as disclosed by Japan 109.

8) Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 109 in view of Japan 006 (JP 2-114006).

As to claims 10-12, it would have been obvious to one of ordinary skill in the art to provide the lateral grooves of Japan 109's block pattern tire tread with wide and narrow portions and a planar chamfer since Japan 006 suggests generating sufficient lateral force and improving wet performance by forming a thin rib in the lateral grooves wherein this rib may form a planar chamfer portion as shown in figure 17. With respect to claim 11, it would have been obvious to use five block rows instead of four block rows in Japan 109's tire tread since it is taken as well known / conventional per se in the tire tread art to use either four or five block rows in a block pattern tire tread. With respect to claim 12, the optimum height and width of the planar chamfer in the lateral groove would have been obvious in view of Japan 006's teaching to obtain the result of generating sufficient lateral force and improving wet performance by forming a thin rib in the lateral grooves wherein this rib may form a planar chamfer portion as shown in figure 17.

9) Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 109 in view of Europe 457 (EP 890457).

As to claims 13-15, it would have been obvious to one of ordinary skill in the art to form sipes ("second narrow grooves") in Japan 109's blocks since Europe 457 suggests forming sipes in blocks to improve wet grip performance and braking performance on ice. With respect to claims 14 and 15, Europe 457 teaches the claimed narrow groove structure. See figure 1.

Japan 315

10) Claims 1 and 3-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 315 (JP 11-91315) in view of Japan 109.

Japan 315 discloses a pneumatic tire with a tread comprising a central land row and a shoulder land rows. The central land row comprises central crossing grooves 3. A pair of these grooves 3 is shown as being connected to by a single line. One of ordinary skill in the art would readily understand that this line is a sipe (narrow groove) since sipes are usually drawn in the tread art as being lines since they are so narrow. Hence, Japan 315 is considered to teach the subject matter of claim 3. Japan 315 does not recite chamfer portions as in claim 1. However, it would have been obvious to one of ordinary skill in the art to provide Japan 315's central land row with "chamfer portions" as claimed in view of Japan 109's suggestion to suppress uneven wear and reduce resonance sound by forming projecting parts 18 are formed on the walls of blocks facing circumferential grooves.

Art Unit: 1733

Allowable Subject Matter

11) **Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

The prior art fails to suggest the specific location and chamfer portion structure as in claim 2 in combination with the subject matter of claim 1. It is emphasized that Japan 109's projecting part 18 is not at an obtuse corner and Japan 320 (JP 11-334320) fails to teach the base of a substantially trapezoidally shaped chamfer portion being substantially parallel to the circumferential direction.

Remarks

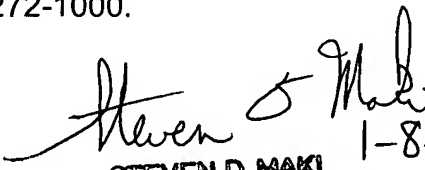
12) The remaining references are of interest.

13) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven D. Maki
January 8, 2007


STEVEN D. MAKI
PRIMARY EXAMINER
1-8-07